

RESPONSE

The Examiner has, in response to Applicants' Appeal Brief, reopened prosecution on the merits. The Examiner raised certain objections to some of the claims as set forth in the Applicants' August, 2004 Response, and rejected all of the other remaining claims under Sec. 103(a). No Sec. 102 bases for rejection have been interposed.

As set forth below, the Applicants have overcome the objections identified by the Examiner. Applicants further submit that inventions claimed in the pending claims are not taught or suggested by the prior art, and therefore request allowance of the claims.

The Objections:

The Examiner indicated in the Office Action mailed November 24, 2004 that the "amendment filed 08/28/2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure." The Examiner then goes on to cite particular limitations from claims 31-34 that were added in this amendment. As such, the Applicants understand that the amendment, insofar as it involved the amendment of any other pending claims is not objected to. (Claim 6 has now been amended to depend only from claim 1.)

As to claims 31-34, however, the objection that these claims introduce new matter is not well taken. As for claim 31, "wherein the lamp housing is comprised of a thermoplastic material" is supported, for example at p. 3, lines 17-18, the very beginning of the "Summary of Invention" section. See also Abstract, lines 1-2. Further, the

“injection-molded plastic housing” as described at p. 5, lines 20-23, would be understood by a person of ordinary skill in the art to include to a thermoplastic material.

Similarly, as for claim 32, wherein the contoured (or, as in the current claims, non-planar) surface “is comprised of a plurality of compartments, each compartment being generally concave” is fully supported by, for example, p. 6, line 14 – p. 7, line 5. See also Fig. 6, at 116.

The limitations found in claims 33 and 34, respectively (“wherein the conductive material and reflective coating are formed on the substrate within the same vacuum chamber” and “wherein the conductive material and reflective coating are formed on the substrate simultaneously in the same vacuum chamber”), are supported by the application at p. 10, lines 22-28.

Thus, each of the limitations found in each of these claims are fully described in the application as filed, and examination of these claims is hereby requested.

The Rejections

The linchpins of the Examiner’s rejection of claim 1 in the current Office Action are (1) an unaccredited definition of the word “contoured” as used in that claim and (2) that Suzuki can be combined with Elarde to render the claimed invention obvious.

Applicants believe that the first basis is not correct, given the understanding of the person of ordinary skill in the art, but has amended the claims to overcome this rejection. Furthermore, the Applicants believe that Suzuki cannot properly be combined with Elarde, as it specifically teaches away from the invention.

As for the first basis, the Examiner defined “contoured” as “The outline of a figure, body, or mass.” Thus, if Applicants understand the Examiner’s rejection, the Examiner is suggesting that “contoured substrate” can include a planar substrate which, even then, does not bring the claimed invention within the ambit of any particular prior art reference.

Applicants disagree with the suggestion that contoured would be understood by persons skilled in the art to include a planar substrate. Webster’s Ninth New Collegiate Dictionary (1989) defines “contour, *adj*” as “following contour lines or forming furrows or ridges along them.” “Contour, *n*” is defined as “an outline *esp. of a curving or irregular figure.*” (Emphasis added.) Nevertheless, to avoid any ambiguity, Applicants have now replaced the word “contoured” with “generally non-planar” in claim 1. This amendment is clearly supported by Figures 6-11, each of which clearly shows at least one layer of conductive material formed on a generally non-planar surface of a substrate. *See, e.g., Fig. 6 at 116.*

As for the attempted combination of Suzuki and Elarde, and as discussed at length in Applicants’ Appeal Brief, Suzuki simply does not teach or suggest such a claimed configuration. To the contrary Suzuki teaches away from the invention. Whereas Suzuki explicitly teaches that the reflection surface 30 can be formed by “uniformly applying a coating material to the inner surface [of the substrate]” (col. 4, lines 28-30), Suzuki specifically requires that the circuit must be applied in a different manner, using a “flat arranging material” (col. 4, lines 14-27) such as a “flexible printed circuit” or a “flexible flat circuit” (col. 4, lines 40-41).

Elarde also fails to teach the claimed combination. To the contrary, Elarde requires a “generally planar insulative substrate 20” (col. 3, lines 7-9). Furthermore, Elarde also requires that the channels formed in the surface have a depth “that is generally uniform throughout the entire surface of the substrate” (col. 4, lines 7-11). In fact, Elarde even warns against Moreover, the abrading steps discussed in Elarde would not be compatible with a generally non-planar substrate. Thus, like Suzuki and the other references cited by the Examiner, Elarde fails to teach or suggest the claimed invention which involves direct metallization of a generally non-planar surface of a substrate.

Since Suzuki clearly teaches away from the invention, it cannot fairly be combined with Elarde to suggest the invention.

With this amendment, claim 1 and the claims that depend therefrom, specifically claims 2-5, 8-10, 12-23, 25, 26 and 28-32 are clearly not taught or suggested by the prior art and are in condition for allowance. Furthermore, Elarde and Suzuki in combination certainly do not teach claim 32, which explicitly requires a plurality of compartments, each compartment being generally concave.

As for claims 16 and the claims that depend therefrom, once again, Suzuki teaches away from the claimed invention, by requiring a “flat arranging material” that contains conductors 29 be formed integrally “by molding” the conductors into another material (col. 4, lines 18-20). As such, the conductive layer is not deposited directly on said substrate. By contrast, as also discussed above, Suzuki teaches that the reflection surface 30 can be formed by “uniformly applying a coating material to the inner surface [of the substrate].” (Col. 4, lines 28-30). Suzuki thus acknowledges that material can be

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applied directly to the substrate, yet specifically requires that the conductive layer be integrally molded within a non-conductive material, and then deposited on the substrate of the lamp housing. As such, it teaches away from the invention and cannot be combined with Elarde to render the claimed invention obvious, as argued by the Examiner.

Simply put, Applicants strongly believe that they are entitled to allowance of the pending claims. Applicants have developed new methods for manufacturing conductive lamp housings and new lamp housings which are made possible because of these methods. As such, the claims clearly define patentable subject matter and should be deemed allowable.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

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Grantland Drutchas
Reg. No. 32,565